

In the Specification

At page 1, lines 5 – 7, please replace the paragraph as follows (underlined denotes replacements additions and strikethrough notes deletions):

This application is related to and fully incorporates U.S. Patent Application Serial No. ~~(AMDA.477PA)~~09/586,192, entitled “Heating System and Method Therefor,” and filed concurrently herewith.

At page 5, lines 4 – 15, please replace the paragraph as follows (underlined denotes replacements additions and strikethrough notes deletions):

According to an example embodiment of the present invention, a semiconductor die, such as a wire-bond or flip-chip type die, is manufactured having a plurality of heating elements formed therein. The heating elements are arranged in the device in a manner that facilitates selective heating of the die for analysis. A controller is adapted to control heating elements to selectively heat one or more portions of the die adjacent the elements while the die is being operated. The heat and operation of the die are then used to analyze the die, such as by obtaining a response from the die indicating a failure when heated. Arranging the heating elements within the die is particularly advantageous in that it makes possible selective heating of one or more portions of circuitry in an efficient and easy to use manner, and can be performed while the die is still in the wafer. Isolation of defects and design flaws is enhanced, improving the ability to design and analyze semiconductor dice.

At page 12, lines 17 – 23 and page 13, lines 1 – 5, please replace the paragraph as follows (underlined denotes replacements additions and strikethrough notes deletions):

In still another application, and referring again to FIG. 2, the even-numbered elements at locations in rows A, C and E are selectively heated. Selecting elements that are distanced as such caused localized heating in various portions of the die at once, and the distance between the heated elements can be maintained such that heat from each element does not interfere with heat from another element. This is particularly useful, for example, for analyzing groups of critical paths to more efficiently identify defects and to speed the analysis process. If the entire group of critical paths withstand the application of heat via the grid, the heated elements are turned off,

another group of elements is powered (*e.g.*, the odd-numbered elements at locations in rows B, D and F), and the test is repeated. Once a defect has been found to exist corresponding to a critical timing path heated by the group of elements, further analysis is performed on ~~portion~~portions of the die heated by the group of elements causing a defect.